Steve Troxler
Commissioner

North Carolina Department of Agriculture and Consumer Services
Structural Pest Control and Pesticides Division

Joe Reardon,
Assistant Commissioner for Consumer Protection

James W. Burnette, Jr.
Director

May 21, 2020

Tawanda Maignan, Team Leader
Emergency Response Team
US EPA Office of Pesticide Programs
Document Processing Desk (EMEX)
Room S4900, One Potomac Yard
2777 Crystal Drive
Arlington, VA 22202

Dear Ms. Maignan,

This letter notifies the EPA that I am requesting the renewal of a Specific Exemption under Section 18 of FIFRA to allow the use of the insecticide bifenthrin to control the Brown Marmorated Stink Bug (BMSB) in apple and peach orchards in North Carolina. Bifenthrin is the active ingredient in FMC Brigade WSB (Reg.# 279-3108), UPL Bifenture EC (Reg.# 70506-57), and UPL Bifenture 10DF (Reg.# 70506-227), all of which are being requested for this exemption. The two registrants, FMC and UPL fully support this request.

According to Dr. Jim Walgenbach, a Professor and Extension Entomologist at N.C. State University, the BMSB has reached most portions of North Carolina and was found on apple and peach trees in 2010 through 2019. The BMSB is known to be present in high densities in North Carolina counties that account for the major production of apples and peaches, including Henderson, Polk, Cleveland, Lincoln, Wilkes, Alexander, Moore, Montgomery and Anson. Since the BMSB continues to be a significant threat to our apple and peach crops, it remains important for us to provide our growers with effective control options. By Dr. Walgenbach's estimates, up to 2,500 of North Carolina's 6,000 acres of apple trees and up to 500 of our state's 4,500 acres of peach trees may need bifenthrin treatments for BMSB in 2020.

North Carolina will also be participating in the renewal of last year's exemption that allowed applications of dinotefuran to control this pest on these crops. According to Dr. Walgenbach, bifenthrin is also needed to help provide protection during the middle of the growing season. Dinotefuran applications are limited to only two per season and due to the short preharvest interval of three days, are best utilized at the end of the season just prior to harvest. If applied mid-season, dinotefuran will not maintain a sufficient residual to be effective against late season BMSB populations. For these reasons, North Carolina is participating in the regional request to renew the bifenthrin emergency exemption for 2020.

It is our understanding that the Maryland Department of Agriculture will submit to your office a regional section 18 package for this use on behalf of several states. North Carolina is included as a

partnering state in this request. Please refer to MDA's package for much of the information supporting this use in North Carolina. We have also enclosed some additional information specific to our state.

In order to provide apple and peach growers in the affected counties the opportunity to continue producing a profitable crop, I am requesting the renewal of this emergency exemption. Should you have any questions, feel free to contact Dr. Jim Walgenbach at 828-684-3562 or Jim_Walgenbach@ncsu.edu or Lee Davis of the NCDA&CS Pesticide Section at 919-857-4165 or lee.davis@ncagr.gov.

Sincerely,

Steven W. Troxler
Commissioner

cc: North Carolina Pesticide Board
Dr. Richard H. Linton, Dean, College of Agriculture and Life Sciences, NCSU
Mr. Greg Nix, President, North Carolina Apple Growers Association
Mr. Stephen Greene, President, North Carolina Peach Growers Society, Inc.
Dr. Jim Walgenbach, Professor and Extension Entomologist, NCSU

STREAMLINED REPEAT REQUEST
SECTION 18 SPECIFIC EXEMPTION
NORTH CAROLINA
JUNE 1, 2020

USE BEING REQUESTED

ACTIVE INGREDIENT:	BIFENTHRIN
BRAND NAMES:	BRIGADE WSB, BIFENTHRIN EC, & BIFENTHRIN 10DF INSECTICIDES
EPA REG. NUMBERS:	279-3108, 70506-57, & 70506-227
SITE:	APPLE, PEACH, AND NECTARINE TREES
PEST:	BROWN MARMORATED STINK BUG
FULL APPLICATION DATE:	MAY 2012
FULL APPLICATION ID#:	12NC01 (apple), 12NC02 (peach), 12NC03 (nectarine)
YEARS REQUESTED:	FIRST SPECIFIC EXEMPTION REQUEST WAS SUBMITTED AND GRANTED IN 2012. STREAMLINED REQUEST SUBMITTED AND GRANTED IN 2013 - 2019.

Situation:

1. The emergency condition(s) described in the previously submitted emergency exemption application continues to exist.

   The situation regarding the need for an emergency label is identical to 2019.

2. All information submitted in the previously submitted emergency exemption application is still accurate: ***or*** except as expressly identified in the submitted re-certification application, all information submitted in the previously submitted emergency exemption application is still accurate.

   All information submitted in our 2019 application is still accurate.

   The emergency exemption request submitted by MDA is on behalf of several partnering states including North Carolina. Please refer to that document for additional information.

3. The proposed conditions of use are identical to the conditions of use EPA approved previously (indicate ID# and date); ***or*** the proposed conditions of use are identical to the conditions of use EPA approved for the previous emergency exemption (indicate ID# and date) except as expressly identified (explanation attached).

   The conditions of use are identical to those conditions approved by the EPA in 2019. (ID# 19NC05 (apple), 19NC06 (peach), 19NC07 (nectarine), Date: July 24, 2019)

4. There are no additional conditions or limitations on the eligibility for recertification identified in the previous notice of approval; ***or*** any conditions or limitations on the eligibility for recertification identified in the previous notice of approval of the exemption have been responded to (explanation attached).

   No additional conditions or limitations on the eligibility for recertification were identified in the previous notice of approval.

5. The applicant has not newly become aware of any alternative chemical or nonchemical practice that may offer a meaningful level of pest control; ***or*** if any such new alternative controls are available, documentation is provided that demonstrates that each such known chemical or practice does not provide adequate control or is not economically or environmentally feasible (explanation attached).

   No new alternative chemicals or economically viable nonchemical practices have been identified that will provide acceptable control of this pest.

NC STATE UNIVERSITY

Mountain Horticultural Crops Research and Extension Center
455 Research Dr.
Mills River, NC 28759
(828) 684-3562
Jim_Walgenbach@ncsu.edu

May 15, 2020

Mr. Lee Davis
Pesticide Registration Manager
Structural Pest Control and Pesticide Division
NCDA&CS
Raleigh, NC 27607

Dear Mr. Davis,

This letter is to express my support for the NCDA&CS participation in the renewal of the regional emergency exemption request (Section 18) for the insecticides dinotefuran to control the brown marmorated stink bug (BMSB) on apples, and bifenthrin to control BMSB on apples and peaches in NC. These renewal requests are regional collaborations among eastern US states, with the Virginia Department of Agriculture & Consumer Services and the Maryland Department of Agriculture taking lead roles in submitting the dinotefuran and bifenthrin requests to the EPA, respectively.

BMSB is an invasive pest and since 2015 has been the most important arthropod pest of tree fruits in North Carolina. In 2015, an estimated 50% of apple and peach growers in the mountain and piedmont production regions reported damage by BMSB, and at least half of those reported damage in excess of 25%. The availability of bifenthrin and dinotefuran through a Section 18 request from 2016-2019 has helped to minimize damage by this pest, during which damage in commercial orchards has averaged about 1.8%. As a comparison, BMSB damage in non-treated apples in 2019 averaged 27.5%. The decreasing level of damage is due to the availability of dinotefuran and bifenthrin and increased grower knowledge on how to use these products. There is no reason to believe that BMSB populations will decline to non-damaging levels in 2020, and the need for this Section 18 request remains critical to avoiding potential devastating crop losses. The estimated acreage to be treated in 2020 is 4,000 acres with dinotefuran and 3,000 acres with bifenthrin.

The majority of insecticides registered on apples and peaches are only marginally effective against BMSB, and reliance on those products has not provided adequate control where populations have been established for longer periods of time. Section 18 renewal requests for both bifenthrin and dinotefuran, two of the more effective products against BMSB, will provide the needed flexibility to manage this pest. Bifenthrin, with a 14-day preharvest interval, will provide control options during mid-season, while dinotefuran, with a 3-day preharvest interval, offers an option for late-season control. The availability of both products with different modes of action is also needed for resistance management programs.

Thank you for your time and effort in putting together the package of information required for North Carolina's participation in these requests.

Sincerely,

James F. Walgenbach
WNR Distinguished Professor & Extension Entomologist

UPL NA Inc.
Crystal Layton
630 Freedom Business Center
Suite 402
King of Prussia, PA 19406
Phone: 229-583-3006

April 24, 2020

Via e-mail

Lee Davis
Pesticide Registration Manager
NCDA & CS
lee.davis@ncagr.gov

RE: Section 18 Letter of Support for Bifenture EC and Bifenture 10DF Insecticides

Dear Mr. Davis,

UPL NA Inc. [United Phosphorus, Inc. (UPI)] fully supports the Section 18 emergency exemption for use of Bifenture EC and Bifenture 10DF Insecticides, containing the active ingredient bifenthrin for control of Brown Marmorated Stink Bug (*Halyomorpha halys*) on apples, peaches and nectarines in North Carolina (and other supporting States). The products we supply are:

Bifenture® EC Agricultural Insecticide (EPA Reg. No. 70506-57)
Bifenture® 10DF Insecticide/Miticide (EPA Reg. No. 70506-227)

UPL NA Inc. will be able to supply product to meet the market demand for 2020.

Progress toward a Section 3 registration: In 2016, IR-4 submitted a petition to establish a tolerance for bifenthrin on apples (group 11-10) and peaches and nectarines (subgroup 12-12B). This petition appears to be pending with EPA.

If you have any questions, please feel free to contact me directly at 229-583-3006 or crystal.layton@upl-ltd.com. If you have technical questions about the product and control of Brown Marmorated Stink Bug, please contact Paul Neese at 919-257-1825 or Paul.Neese@upl-ltd.com.

Thank you for your time and consideration.

Sincerely,

Crystal Layton
Regulatory Manager

Cc: Paul Neese

RESTRICTED USE PESTICIDE

Toxic to fish and aquatic organisms.

For retail sale to and use only by certified applicators, or persons under their direct supervision, and only for the uses covered by the certified applicator's certification.

For distribution and use only in North Carolina under an emergency exemption authorized under Section 18 of FIFRA

All applicable directions, restrictions, and precautions on the EPA registered product labels as well as those on these directions for use must be followed. These directions for use must be in the possession of the user at the time of pesticide application.

Products: Bifenture® EC Agricultural Insecticide (EPA Reg. No. 70506-57)
Bifenture® 10DF Insecticide/Miticide (EPA Reg. No. 70506-227)

Firm Name: United Phosphorus, Inc.
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406

Crop/Site/Commodity: Apples, Peaches, Nectarines

File Symbol:

Target Pest/Problem: Brown Marmorated Stink Bug (*Halyomorpha halys*)

Dosage: Apply 5.12 – 12.8 fl ozs (0.08-0.20 lbs ai) per acre of **Bifenture EC Agricultural Insecticide** (EPA Reg. No. 70506-57), **OR**
Apply 12.8 – 32.0 ozs (0.08-0.20 lbs ai) per acre of **Bifenture 10DF Insecticide/Miticide** (EPA Reg. No. 70506-227)
Use higher rates under heavy insect pressure.

Dilution Rate: **By Ground Only:** Apply as a dilute spray (minimum of 200 gallons of finished spray per acre) or concentrate (minimum of 50 gallons of finished spray per acre).
For best control, thorough coverage is necessary.

Frequency/Timing of Applications: Applications should be applied when populations reach locally determined economic thresholds. Consult the cooperative extension service, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.
Do not apply more than 32 fl ozs (0.50 lbs ai) of **Bifenture EC Agricultural Insecticide** or 80 ozs (0.50 lbs ai) of **Bifenture 10DF Insecticide/Miticide** per acre per season.
For all Bifenthrin products used, do not apply more than a total of 0.50 lbs ai/acre per season.
Apply as necessary to maintain control using a minimum of 30-day spray intervals.
Do not apply this product until after petal fall.
Do not graze livestock in treated orchards or cut treated cover crops for feed.

Restrictions: This pesticide is extremely toxic to fish and aquatic invertebrates. Use with care when applying in areas adjacent to any body of water. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the high mean water mark. Do not make applications when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash waters.

This product is highly toxic to bees exposed directly to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

The use of bifenthrin is prohibited in areas that may result in exposure of endangered species to bifenthrin. Prior to use in a particular county contact the local extension service for procedures and precautions to use to protect endangered species.

Restricted Entry Interval (REI): 12 hours

Pre-Harvest Interval (PHI): 14 days

Restricted Use Pesticide: When used in North Carolina, applications can only be made by certified applicators or by persons under their direct supervision and only for those uses covered by the certified applicators certification.

This exemption is effective _____ through _____.

FMC Corporation
2929 Walnut Street
Philadelphia, PA 19104
USA

215.299.6000
fmc.com

April 23, 2020

Lee Davis
North Carolina Department of Agriculture & Consumer Services
Pesticide Division
1090 Mail Service Center
Raleigh, NC 27699-1090

RE: Section 18 Letter of Support

Dear Mr. Davis:

As the registrant for Brigade WSB insecticide/miticide (EPA Reg No. 279-3108), FMC fully supports the proposed renewal of a Section 18 emergency exemption use of this product in North Carolina on apple, peach, and nectarine to control the Brown Marmorated Stink Bug (*Halyomorpha halys*).

FMC is committed to working with IR-4 in their program to obtain Section 3 registrations for use of bifenthrin on pome and stone fruit. IR-4 conducted field magnitude of the residue trials on apple (PR 11016) and peach (PR 11017) in 2013 and submitted tolerance petitions for these new uses to US EPA in June 2016. An Agency decision on these uses was expected in March 2019, but the EPA requested an 18-month extension of the PRIA date as they continue with the registration review process for the active ingredient bifenthrin. The new PRIA date for the IR-4 submission is now September 25, 2020.

Please contact me by telephone at 215-299-6717 or by email at tim.formella@fmc.com if you have any questions on this matter.

Sincerely,

Timothy M. Formella

Timothy M. Formella
Senior Product Registration Manager
FMC Corporation

RESTRICTED USE PESTICIDE

Toxic to fish and aquatic organisms.

For retail sale to and use only by certified applicators or persons under their direct supervision, and only for those uses covered by the certified applicator's certificate

BRIGADE® WSB

INSECTICIDE / MITICIDE

Section 18 EXEMPTION

FOR DISTRIBUTION AND USE ONLY IN NORTH CAROLINA

EPA File Symbol:
20-NC-___ (apple),
20-NC-___ (peach),
20-NC-___ (nectarine)

EMERGENCY CALLS: 800-331-3148

ALL APPLICABLE DIRECTIONS, RESTRICTIONS, AND PRECAUTIONS ON THE REGISTERED PRODUCT LABEL FOR BRIGADE WSB (EPA REG. NO. 279-3108) ARE TO BE FOLLOWED

THESE DIRECTIONS FOR USE MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF PESTICIDE APPLICATION.

This exemption is effective from _____, 2020 through _____, 2020

Crop	Pest Controlled	Rate of Application
Apples, Peaches, Nectarines	Brown marmorated stink bug	12.8 - 32 oz/acre (0.08 - 0.2 lb ai/acre)

Directions for Use: Application must be made post-bloom, by ground only as a dilute (minimum of 200 gallons of finished spray per acre) or concentrate (minimum of 50 gallons of finished spray per acre) in sufficient water to provide thorough coverage. Do not apply this product until after petal fall. Thorough coverage is essential to achieve control. One bag = 0.05 lb ai = 8 oz formulated product.

Restrictions: Do not apply more than 32 oz/acre (0.2 lb ai/acre) per application. Do not apply more than 80 oz/acre (0.5 lb ai/acre) per year. Do not make applications less than 30 days apart. Do not graze livestock in treated areas. Do not apply within 14 days of harvest. Do not allow entry into treated areas for 12 hours following application.

Any adverse effects resulting from the use of Brigade WSB under this emergency exemption must be immediately reported to the North Carolina Department of Agriculture & Consumer Services.

label code: DR-4452 042320

FMC An Agricultural Sciences Company

FMC Corporation
2929 Walnut Street
Philadelphia, PA 19104

SECTION 18 FINAL REPORT 2019

Bifenthrin - North Carolina - Apples, Peaches and Nectarines

FILE SYMBOLS: (19NC05-apple), (19NC06-peaches) & (19NC07-nectarines)

1. **Total acreage, amount of commodity or other unit treated and the total quantity of the pesticide used:** 3,000 acres were treated with bifenthrin for BMSB in 2019.

2. **A discussion of the effectiveness of the pesticide in dealing with the emergency condition:** Based on end-of-season surveys in commercial orchards, BMSB damage to apples averaged 1.6%. This is compared to <1.0%, 2.8%, 4.8% and 20% in 2018, 2017, 2016, and 2015. The slightly higher damage in 2019 compared to 2018 was due to much high BMSB populations in 2019. This reduction in damage over time is a due to more growers using bifenthrin and dinotefuran in successive years, grower's increased knowledge of properly timing applications for BMSB.

3. **A description of any unexpected adverse affects which resulted from the use of the pesticide under the exemption:** None reported.

4. **The results of any monitoring required and/or carried out under the exemption:** NA

5. **A discussion of any enforcement actions taken in connection with the exemption:** NA

6. **Methods of disposition of a food crop, if required to be destroyed under the exemption:** NA

7. **Any other information requested by the Administrator.**

8. **In cases where a crisis exemption was declared, an explanation as to why there was a need to utilize the crisis provisions.** NA